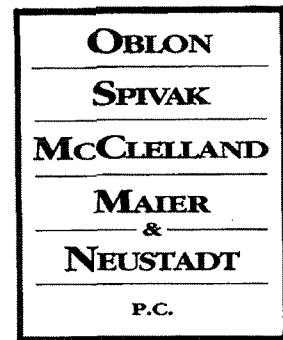


Exhibit A



ATTORNEYS AT LAW

JOHN F. PRESPEL
(703) 412-3536
JPRESPEL@OBLON.COM
*BAR OTHER THAN VIRGINIA

January 12, 2007
Via Email and US Mail

Jeremy C. McDiarmid, Esq.
ROBINS, KAPLAN, MILLER & CIRESI L.L.P.
800 Boylston Street, 25th Floor
Boston, Massachusetts 02199

Re: *Honeywell Litigation*
C.A. Nos. 04-1337, -1338, and 01536-KAJ
Our Ref.: 260613-261775US

Dear Jeremy:

In accordance with paragraph 6 of the Stipulated Protective Order, Optrex hereby serves notice that it intends to disclose information designated as "confidential" under the Protective Order to Richard Knox and Robert Smith-Gillespie to facilitate their services as a consulting and/or testifying expert in this case. Mr. Knox's and Mr. Smith-Gillespie's resumes are enclosed with this letter.

Sincerely,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in dark ink, appearing to be 'JF Prespel', written over the printed name.

John F. Prespel

Robert D. Smith-Gillespie

2790 Timberline Dr.
Eugene, Oregon 97405
(541)914-2586 rsg.fpd@comcast.net

Experienced product and technology development engineer with a diverse background in design and manufacturing of display products focusing on LCD technologies. Roles have included project and team management and technical contributor positions in automotive, aviation and consumer product displays.

Roles and Responsibilities**FPD Design & Consulting LLC President****2002 - Present****Eugene, Oregon**

Established display product design and development consulting company specializing in integration of commercial display components into customer specified products. Engineering work includes optical development of enhanced backlight systems for OEM displays, design of camera system for police car applications, and expert witness on LCD mechanical and backlight litigation. Clients include:

- Dupont Display Solutions, Torrance, CA [Engineering design & consulting – displays (8/04-Present)]
- Driven Technologies, Irvine, CA [LED backlight design for flight simulator LCD (1/05-3/05)]
- E3 Innovation, Inc., Phoenix, AZ [Engineering design & consulting – displays (8/04-Present)]
- QSDM, Inc., Mississauga, Ontario, Canada [Product design-Avionics display assemblies ('02-Present)]
- White Electronic Designs, Beaverton, OR [Design of Ruggedized, hi-bright LCD panels (5/03-6/04)]

As North American sales and engineer for French display test equipment manufacturer, ELDIM, I lead sales demonstrations and training on high-end photometric and imaging colorimeter display test systems.

- ELDIM, Herouville-St. Claire, France [Sales-Optical test equipment for LCDs ('02-Present)]

Patent Litigation – Expert Witness

- Morgan Lewis & Brokious LLP, Wash. D.C. [Patent infringement – 7/05 to Present]
LG Philips LCD Co. Ltd., v. Chungwa Picture Tubes, Inc.; U.S. District Court, So. Distric of Calif.
- Jacobson Holman LLP, Washington D.C. [Patent infringement – 5/05 to 7/05 :Settled]
Audiovox v. Epsilon Electronics, Inc. Civil Action No. 03 Civ 6235, Eastern District of N.Y.
- Shaw Pittman LLP and Bingham McCutchen LLP [Patent infringement – 6/04 to 7/05 :Settled]
Richard Ditzik v. ViewSonic Corp., et. al., filed in the U.S. District Court, Eastern District of Michigan, Southern Division; Case No. 03-74043.
- Alschuler Grossman Stein & Kahn LLP [Patent infringement – 12/04 7/05 :Settled]
Sharp Corporation v. AU Optronics Corporation, et. al., Case No. C03-04244 MMC filed in the United States District Court, Northern District of California. Deposed, no trial.

Rosen Products LLC**Technical Staff Engineer****1999 - 2002****Eugene, Oregon**

Member of senior technical staff reporting to V.P. of engineering. Responsible for management of LCD display technology development, strategic planning and product benchmarking for automotive and aircraft entertainment systems.

- Acted as Technology Champion for LCD flat panel displays and DVD source equipment. Worked closely with Korean, Taiwanese and Japanese LCD factories on new products.
- Developed and directed "Technology Platform Champion" team for coordinating and advancing knowledge base in product critical technology areas.
- Product engineering manager for business aviation Cabin Entertainment Display Systems.

Three-Five Systems, Inc.**Technical Specialist, Displays****1997 - 1999****Tempe, Arizona**

Cross-functional specialist working with LCD mechanical and electrical design teams integrating custom LCDs into consumer products. Responsible for injection molded part design and supplier tooling development for polycarbonate light guides. Developed Asian suppliers for molded components. Backlight mechanical design in ProEngineer.

- Worked as technical contributor on product designs providing analyses of LCD module designs utilizing TN, STN, and FSTN displays and EL, LED, and CCFL backlights.
- Acted as technical consultant in lighting design, photometry/colorimetry, optical materials including birefringent films, holographic reflectors, diffusers, light pipes and color filters.

Robert D. Smith-Gillespie

Honeywell, Air Transport Div. Principal Engineer

1992 - 1997

Phoenix, Arizona

- Responsible for mechanical and optical design of the primary displays for the Boeing 777 airplane. Worked closely with Boeing flight-deck engineers on aircraft fit and packaging and later with lighting engineers to optimize display system performance.
- Directed supplier process DOE to improve luminance and color ageing performance of 777 backlight. Supported development of automated lamp fabrication process equipment at supplier.
- Performed sensitivity analyses with Japanese supplier to reduce LCD color performance variation.
- Led three company development of integrated switch panel for 737-700 MCP. Design incorporated electro-mechanical switches, high-luminance LCDs and sunlight readable LED annunciators.

Honeywell, Air Transport Div. Sr. Project Engineer

1989 - 1992

- Responsible for mechanical design and support of flight deck avionics equipment including mechanical packaging, FEA for chassis and CCA thermal analysis, stress analysis. Lead lighted product development and qualification testing.
- Worked closely with suppliers to implement product improvement and cost reduction initiatives on LCD modules, optical filters, and mechanical switch components.

Sperry Corp. (Honeywell ATSD) Manufacturing Engineer

1985 - 1989

Phoenix, Arizona

Developed tooling and processes for flight controller manufacturing line including circuit card assembly process optimization, electro-mechanical troubleshooting and supplier quality development.

Eastern Arizona College

Instructor, Math & Physics

1983 - 1985

Thatcher, Arizona

Education

Arizona State University, Tempe, Arizona

May 1989

BS Mechanical Engineering

State University of New York, Plattsburgh, NY

May 1981

BA Physics

Continuing Education

Classical Optics (PHY 524) – University of Oregon physics department – Fall 2003.

SolidWorks mechanical design training class. Oct. 2002.

Pixelworks HW/SW Developer Training. Sep. 2001.

Video Calibration for Entertainment Systems. Imaging Science Foundation. April 2001.

Liquid Crystal Institute – Kent State University. Short course on LCD physics and material. '98.

Optical System Analysis with ASAP. Breault Research Organization. June '96.

Photometry and Colorimetry & Flat Panel Displays. UCLA Extension Short Course. '93 / '94.

Professional memberships

Society for Information Display (SID) – Conference organizing committee (2001- 2004): Participate in planning annual display symposia including technical paper review and selection and session chair.

Society for Automotive Engineers (SAE) Automotive FDP Metrology Working Group (2000-2002).

Professional Ski Instructors of America (PSIA) – Certified Level II instructor.

Robert D. Smith-Gillespie

Publications and awards

Characterization of Reflective Properties of Displays using Optical Fourier Transform Photometry. Aerospace Lighting Institute, Feb. 2004

Design Requirements for Automotive Entertainment Displays. 8th Annual Symposium on Vehicle Displays, Soc. for Information Display, Oct. 2001.

Widescreen Formats – A Sharper Image. Discussion of entertainment video formats published in business aviation industry newsletter *Velocity*.- Nov. 2001.

Development of a High Luminance, High Contrast Fixed Format LCD. Aerospace Lighting Institute Advanced Symposium, Feb. 1996.

Fixed Format Liquid Crystal Display Readability in Bright Ambient Environments. IEEE 13th Digital Avionics Systems Conference, Nov. 1994.

777 LCD Backlight Life, SPIE Cockpit Displays Conference, April 1994.

Conference Presentation:

Rapid Photo-goniometric Technique for LED Emission Characterization, Fourth International Conference on Solid State Lighting, Aug. 2004, Proc. of SPIE Vol. 5530

Awards:

Honeywell Technical Achievement Award. Awarded by Corporate Fellows Committee for outstanding technical contribution in the field of flat panel display backlighting. Feb. 1997.

Exhibit B

PROCEEDINGS



SPIE—The International Society for Optical Engineering

Cockpit Displays

Darrel G. Hopper
Chair/Editor

7-8 April 1994
Orlando, Florida

Sponsored and Published by
SPIE—The International Society for Optical Engineering



Volume 2219

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Printed in the United States of America.

777 LCD backlight life

Robert D. Smith-Gillespie and Daniel D. Syroid*
Honeywell, Inc., 21111 North 19th Ave., Phoenix AZ 85027

* Mr. Syroid is now with Image Quest Technologies in Fremont, CA

ABSTRACT

Liquid crystal flat panel displays used in avionics applications require an efficient, long life, high luminance backlight capable of dimming over a wide luminance range. If properly designed a fluorescent backlighting system should provide maintenance free operation with only minimal reductions in performance for at least 20,000 hours of operation. The 9.5 inch diagonal size active matrix LCD primary flight instruments on the Boeing 777 aircraft utilize backlights designed to operate for 30,000 hours while providing a nominal maximum white level of 100 fL at the LCD, dropping to 75 fL at the end of the 30,000 hour interval.

To ensure reliability goals for the 777 display systems are met, Honeywell began a three and one-half year life test of the display backlight systems in July of 1992. To date, sixteen backlight assemblies have accumulated over 12,500 hours of test operation using a luminance profile that is representative of that expected for 777 flight operations. This paper describes design and operating characteristics, life test design, and life test results for the backlight systems of the 777 flight deck displays.

1. INTRODUCTION

Honeywell, Inc. was selected by Boeing to develop the flight deck displays for the new 777 aircraft. The 777 uses six primary flight instruments, each with a 6.7 x 6.7 inch active area (9.5 inch diagonal) high resolution, full color, active matrix LCD. The backlight system is designed to optimize the LCD performance by providing maximum color separation while maintaining high spatial luminance uniformity and high luminous efficiency. The backlights in the 777 primary displays provide 100 fL white luminance output, 2000:1 luminance dimming range, wide color gamut, stable operation over all environmental conditions, and an expected 30,000 hour operating life.

The flight critical nature of the primary displays and the push for continuous improvements in avionics equipment MTBF's lead to the obvious need to verify the backlight system design in a life cycle test prior to beginning aircraft flight test. To demonstrate the reliability and life expectancy objectives of the backlight systems, a 30,000 hour life test was initiated in July of 1992. To date, sixteen backlight assemblies have each accumulated over 12,500 hours of test operation using the Boeing specified 777 flight operations luminance profile. With nearly one-half the projected test duration complete, confidence in the production backlight system design for the 777 display units has already been established. Continued testing will ensure that established system requirements for service in the avionics environment are met or exceeded.

2. BACKLIGHT DESIGN SUMMARY

Avionics display systems must provide high performance over a broad range of operating conditions and thermal environments while providing very high reliability and long life. To do so, the display system backlight design must optimize luminous efficiency while minimizing weight and power. The backlight system design for the primary flight instruments on the 777 aircraft incorporates several innovations to achieve a 30,000 hour operating life without sacrificing efficiency or optical performance.

2.1 Design Overview

To achieve long operating life while maintaining optical performance several design factors must be carefully balanced. For avionics displays, high conversion efficiency (i.e. low power) and low weight must be considered along with optical performance factors such as luminance uniformity, luminance stability over temperature, maximum and minimum luminance levels, and lumen maintenance requirements. The 777 backlight system design maximizes conversion efficiencies at all levels while optimizing life extending factors.

To minimize weight and power, the Honeywell displays use a single serpentine, hot cathode fluorescent lamp in a highly reflective integrating cavity with a custom diffuser array and high efficiency drive and control electronics. The lamp operates in a self redundant mode to ensure high reliability. Figure 1 shows an exploded view of the 777 display unit with the backlight mounted on its reflector plate. The heated cathode lamp design was chosen for its high lumen efficiency, high luminance output, and stable dimming characteristics. The much lower cathode fall voltage in a hot cathode lamp (15 V vs. 100 V for cold cathode) makes hot cathode lamps inherently more efficient than cold cathode lamps during high luminance operation. Honeywell's patented single lamp, alternating cathode design keeps the number of cathodes to a minimum with only one cathode actively heated at any time. Should one cathode fail, however, the design allows continued operation on the remaining cathode with nearly full performance.

2.2 Lamp Design Considerations for Long Life

Two primary modes of failure must be considered in fluorescent lamp design for flat panel displays: lumen depreciation and cathode failure. Lumen depreciation is the reduction in visible light output at a given arc power level and occurs through the time dependent reduction in phosphor UV-to-visible light conversion efficiency and through the darkening of the lamp glass wall by mercury penetration. Cathode failure occurs when the cathode filament emission coating is depleted raising the work function and cathode fall voltage to a level where tungsten is sputtered, eventually opening the filament. Long life can only be achieved by balancing the wear out mechanisms and controlling the rate at which each mechanism, lumen depreciation and cathode emission coating depletion, proceeds.

Phosphor lumen depreciation is a function of the arc power dissipated in the lamp phosphor per unit phosphor area. This parameter, termed phosphor loading, is measured in mw/cm^2 . The lower the phosphor loading, the slower the rate of lumen depreciation. Unfortunately for the lamp designer, surface luminance depends heavily on phosphor loading, as well. Again a balance must be achieved to optimize the design for long life. The 777 displays backlight design limits the initial phosphor loading to $56 \text{ mw}/\text{cm}^2$ over an active length of 980 mm. At end of life, phosphor loading increases to $105 \text{ mw}/\text{cm}^2$ to compensate for phosphor depreciation. As the rate of lumen depreciation depends also on the chemical stability of the phosphor, the Honeywell design uses stable, high efficiency phosphors to further limit lumen depreciation effects.

Cathode failure is a catastrophic failure mode in that no warning of impending failure can be detected by the system. To minimize the impact on flight operations, the redundant, alternating cathode design allows the backlight to continue operating at almost full performance until a maintenance operation can be performed. To further reduce the possibility of cathode failure, the cathode is operated at approximately the ideal emissive temperature of 1080°C thereby providing copious electrons to the arc stream while limiting the emission coating evaporation rate.¹ The backlight driver circuit is designed to prevent sputtering by controlling peak currents thereby limiting the current crest factor to a level below the critical value of 1.7. Finally, a robust filament design provides surface area for excess emission coating thus favoring lumen depreciation as the means of lamp failure. Life tests at Honeywell on similar hot cathode lamps have shown filament life of over 30,000 hours of actual operation.

2.3 Backlight Electronics Design Considerations

As previously stated, the backlight drive and control electronics play an important role in meeting backlight service life goals. The backlight electronics for the 777 displays provide closed loop control of lamp luminance for stable light output over the life of the lamp while limiting both the RMS and peak currents to the lamp thereby eliminating sputtering effects at the cathode. The alternating cathode drive effectively doubles cathode life and provides inherent cathode redundancy in

a single lamp. The use of closed loop lamp temperature controls allow operation of the lamp at the maximum efficiency point independent of environmental conditions. Excess drive capacity is provided to compensate for lamp lumen decline and allow maximum luminance operation and 2000:1 dimming capability during the entire backlight life.^{2,3}

3. TEST CONFIGURATION

To ensure that sufficient testing had been performed prior to 777 flight test in June of 1994, the displays backlight life test was initiated using pre-production hardware in July of 1992. The backlight life test will reach the halfway point of 15,000 hour in mid-June of 1994, shortly after the first flight of 777 aircraft. Figure 2 shows the test configuration which consists of a rack enclosing power supplies, monitoring hardware, and drivers for 16 backlight units that are functionally equivalent to the production design. A single backlight and reflector assembly is shown in Figure 3 with the diffuser removed for clarity.

3.1. Backlight Test Unit Configuration

Each backlight test unit is comprised of a serpentine hot cathode fluorescent lamp (meeting the production hardware specifications) within a reflector housing as shown in Figure 3, a front diffuser, an active cooling device, a spiral wrapped lamp heater wire, two feed back photo-sensors, and a pair of electronic driver circuit cards. The backlight emitting area is 6.8 x 6.8 inches. The test units are functionally equivalent to the production hardware in terms of electrical operation and optical characteristics. The thermal control loop ensures that the lamps will operate at the same temperature as those in production display units even though the actual thermal environments are significantly different. Each unit is also equipped with an hour timer and LED's for indication of cathode failure and driver output saturation.

3.3 Ancillary Test Hardware Configuration

The backlight life test ancillary hardware includes the support rack, monitoring equipment, power supplies, and cycle control unit. A block diagram of the hardware configuration is presented in Figure 4. The luminance cycle control unit is programmed to vary the luminance of all 16 units in accordance with the aforementioned 24 hour flight deck luminance cycle which is reproduced in Figure 5 for reference. To perform the environmental stress screen portions of the test, the units are briefly removed from the test rack and transferred to other facilities for vibration and thermal cycling. Likewise, the units are periodically removed for luminance and chromaticity measurements using a PhotoResearch 1980B spectroradiometer.

3.4 Backlight Life Test Parameter Summary

Simulation of actual life cycle conditions in a controlled lab environment is difficult and compromises must be accepted. For example, in an aircraft service environment, the displays would see continual vibration with mechanical and perhaps thermal shocks super-imposed. The backlight life test applies environmental stresses at fixed intervals and does not attempt to super-impose stressors. Test input parameters may be divided into four separate categories: luminance variation, electrical transients and interrupts, temperature variation, and mechanical vibration.

3.4.1 Test Input Parameters

While installed in the rack enclosure shown in Figure 2, the 16 backlight assemblies are subjected to changes in luminance ranging from full-off to full-on with several intermediate dimming levels including 0.10% of maximum luminance. At the 8 hour point in the cycle with the luminance at 60%, the units see a 3 second off transient. Additionally, six 50 millisecond interrupts are applied at various times as shown in Figure 5.

At intervals of 100, 1000, and 2500 hours and every 2500 hours thereafter, the units are subjected to monitored thermal cycling and vibration while under power. The thermal cycle consists of power-up to maximum luminance following 25 minutes of cold soak at -40°C, a 2°C/min. ramp to +70°C where it is held for 30 minutes powering-off at the end of the interval, and a -2°C/min. ramp down to -40°C. The cycle is repeated an additional time. Heater and cooler functions are

tested during the second cycle. All units are subjected to a low level random vibration profile, while powered, for one hour per axis during the regular test intervals.

3.4.2 Measured and Calculated Output Parameters

Monitoring of optical and electrical parameters to ensure unit functionality will be performed at start of test, 100, 1000, 2500 hours and at 2500 hour intervals thereafter for at least 30,000 hours of operation. Parameters to be measured during the test include:

- Arc power, chromaticity and spectral distribution, luminance, and luminance uniformity.
- Luminance at maximum (end of life) arc power.
- Minimum luminance and low luminance uniformity.
- Accumulated test hours for each individual unit.

Several parameters of interest are calculated to provide additional performance tracking information. These include:

- Luminance uniformity based on 25 point measurement where $Unif = (L_{max} - L_{min}) / L_{ave}$.
- Change in chromaticity from start of test ($\Delta u'v'$).
- Lumen efficiency in lumens per watt.
- Percent initial luminance at rated arc power.

3.4.3 Test Failure Criteria

A backlight failure consists of one or more of the following occurrences:

- Catastrophic failure of both cathodes.
- Failure of luminance at eye reference point and screen center to meet the rated high luminance value.
- Failure of the BL to meet the minimum rated luminance.
- Occurrence of noticeable luminance flicker or jumps over the 2000:1 dimming range.
- Failure to meet the luminance uniformity requirement.
- Failure to maintain chromaticity shift to less than or equal to $\Delta u'v' = 0.02$.

4. BACKLIGHT LIFETEST RESULTS

As mentioned previously, the life test backlight assemblies have accumulated an average of over 12,500 hours at this writing. To date, only one catastrophic failure has occurred and this was due to a handling accident in which the lamp was broken when dropped to the floor. The unit was promptly replaced and the hour meter reset. In general, however, performance has followed closely to that predicted based on previous backlight testing. Figures 6, 7, and 8 summarize the most significant data and include, in two cases, long-term performance predictions based on curve fits to the experimental data.

The reduction in light output over time is best evaluated by observing the luminance at screen center at a fixed power level. Figure 6 presents a plot of the percent of initial luminance at 25 arc watts averaged over the 16 backlight test units. Lamp lumen depreciation has resulted in a drop to 72% of initial luminance at 10,000 hours. It should be noted that the rate of lumen depreciation is decreasing over time with a 10% reduction occurring in the first 2500 hours. This follows closely previous predictions and is attributable to initial reactions of the phosphor with the mercury and filler gas in the lamp. Follow-on reductions in lumen output are the result of reductions in phosphor efficiency through aging and mercury darkening of the lamp envelope. It is significant that the backlight uniformity is changing over time as well. Figure 6 shows the percent uniformity increasing (lower numbers mean more uniform luminance) over time with the curve mirroring that of the percent initial luminance. One explanation for this phenomena is that lumen depreciation is occurring more rapidly in the bend regions of lamp thus degrading display uniformity. This, in fact, appears valid as

studies of the lamp surface show increased mercury darkening in the bends.

Figure 7 shows the variation in chromaticity over time. Included is a rough prediction of the trend up to 30,000 hours. Unfortunately, the accuracy of color measurement over a prolonged time has lead to some uncertainty to the precision of this data and the predictions based upon it. The prediction curve has been fit to the last four data points to reduce the influence of photometric calibration changes. Based on the projections, the change in chromaticity at the diffuser relative to initial values will reach a delta $u'v'$ of 0.020 at only 20,000 hours. At 30,000 hours the color will have changed only 0.002 delta $u'v'$ units more to 0.022. [Delta $u'v'$ is the length of a radial from the initial CIE 1976 coordinates to those at some later time.] The LCD color filters, however, moderate the effect of changes to B/L chromaticities resulting in a lesser color delta when measured at the LCD. Simulations have shown that a delta $u'v'$ of 0.022 at the diffuser results in a change of color at the LCD of only 0.017 units.

The most significant result of the testing is presented in Figure 8 which presents measured and predicted maximum display luminance at the LCD surface as a function of time. Based on an exponential curve fit to the luminance data and using the measured transmittance of the LCD assembly, the LCD luminance will stay above 100 fL for more than 20,000 hours and above 75 fL out to 30,000 hours. The display units set a maintenance required flag when the luminance falls below 75 fL. Based on this prediction, the life goals for the Honeywell 777 displays will be met if operation continues without catastrophic failure. After 200,000 hours of combined operation, no catastrophic operational failures have occurred.

CONCLUSION

Improvements to lamp design and fabrication processes which will be implemented on flight hardware should have a positive impact of performance. Additional life improvements should also be seen in service since early assumptions underestimated LCD transmission thus setting luminance levels roughly 20% higher than actually needed for the required display performance. The resulting reduction in phosphor loading should improve lumen maintenance significantly.

The lifetest results presented here demonstrate that the fluorescent backlight systems for the 777 primary flight instruments reliably meet all established performance requirements. Life predictions based on the backlight life test data show that Honeywell is well on a path of achieving the 30,000 hour operating life goal.

ACKNOWLEDGEMENTS

The authors wish to acknowledge John F. Waymouth for his wisdom and guidance on fluorescent lamp principles, Wayne Clark for his early influence on design philosophy, Joe Ruby for his development efforts and expertise on the lamp driver circuit design, Steve Arbeiter, Peter Brown, Ray Cleland, and Phil Imber for their outstanding technical development and test support, Edward Delanty, Dr. Alan Jacobsen, and Donald Newsome of the Boeing 777 Display Technology group for their direction on the establishment of performance and lifetest objectives, and finally, George Csoknyai of LCD Lighting for his support in providing lamps to test.

REFERENCES

1. Electric Discharge Lamps, John F. Waymouth, M.I.T. Press. 1971
2. U.S. Patent 4,998,045 Fluorescent Lamp Dimmer
3. U.S. Patent 5,027,034 Alternating Cathode Fluorescent Lamp Dimmer

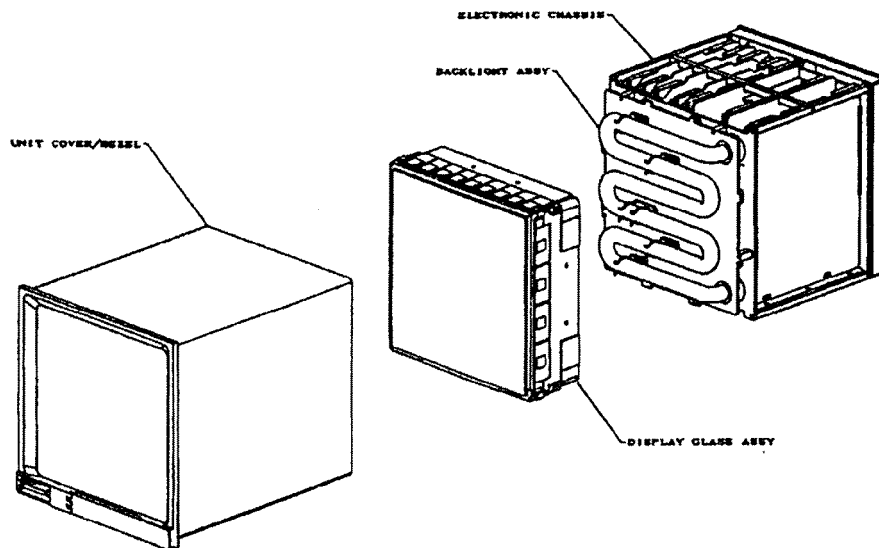


Figure 1. Exploded view of 777 flat panel display unit showing backlight assembly.

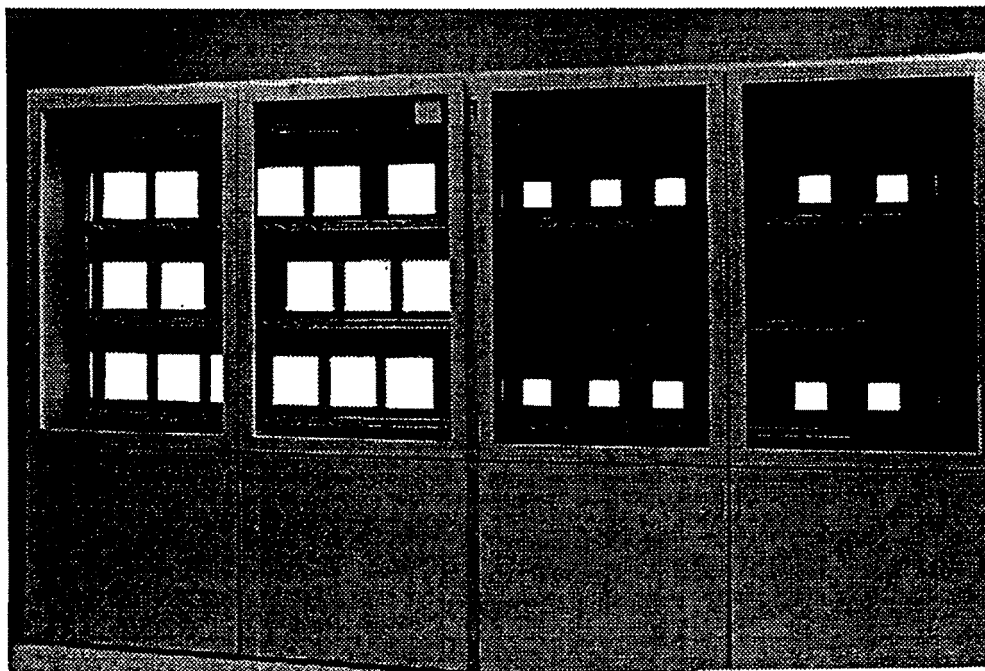


Figure 2. Photograph of backlight life test facility (display unit backlights at left) with diffusers installed over operating displays.

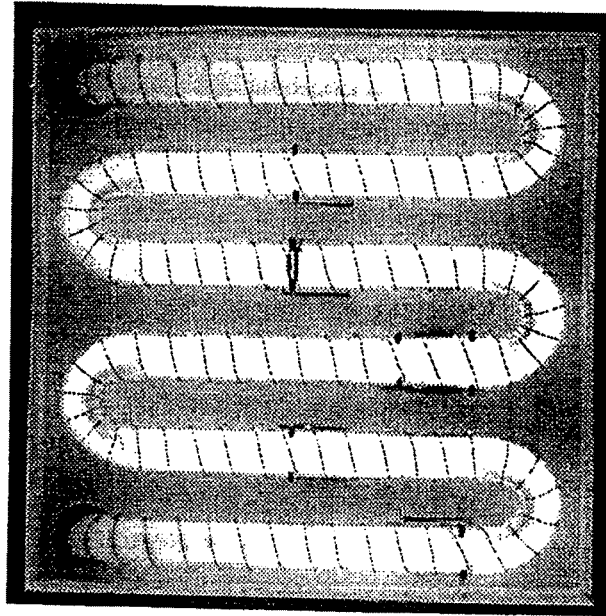


Figure 3. Close-up photograph of life test backlight assembly with diffuser removed to show lamp and reflective enclosure.

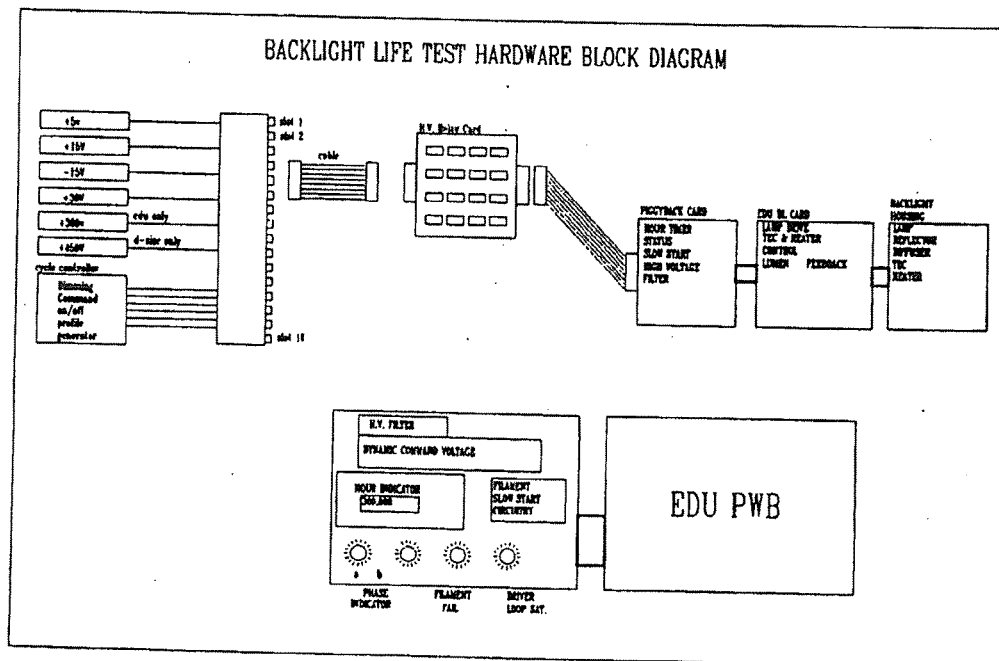


Figure 4. Lifetest hardware block diagram.

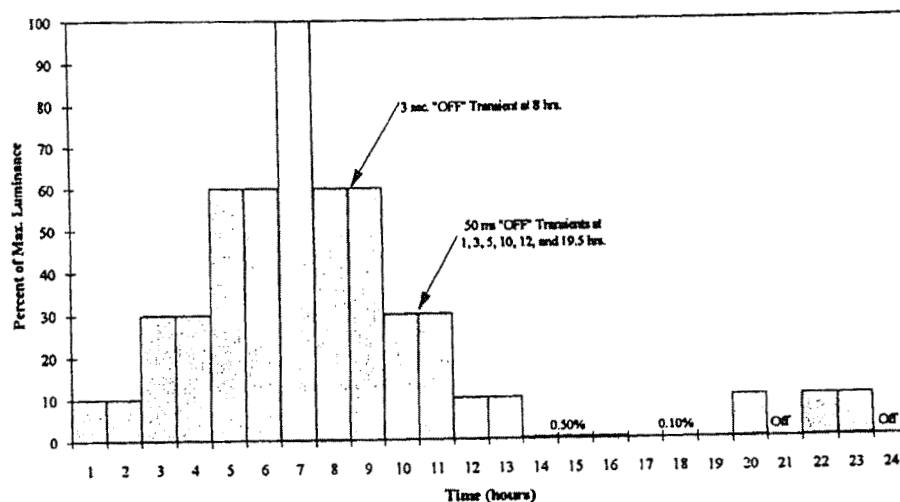


Figure 5. Life test luminance profile based on Boeing 24 hour luminance profile for 777 operation.

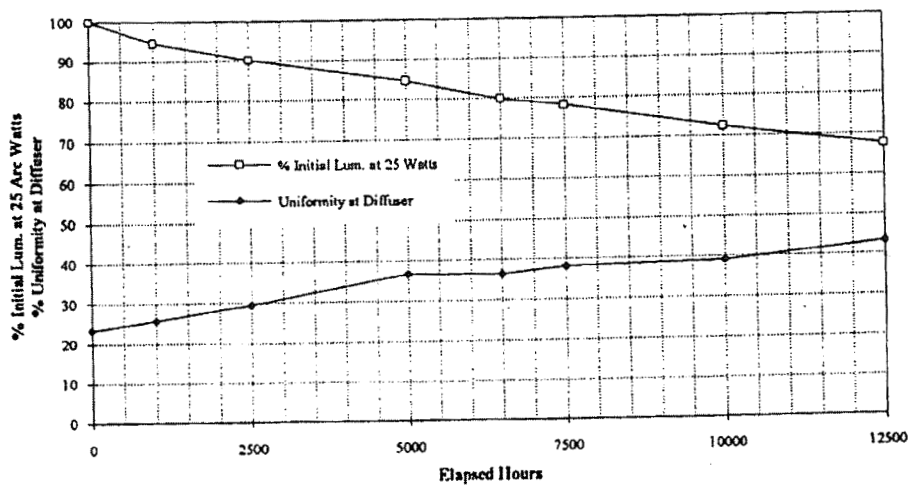


Figure 6. Average variation in percent initial luminance at 25 arc watts and luminance uniformity at diffuser over test duration.

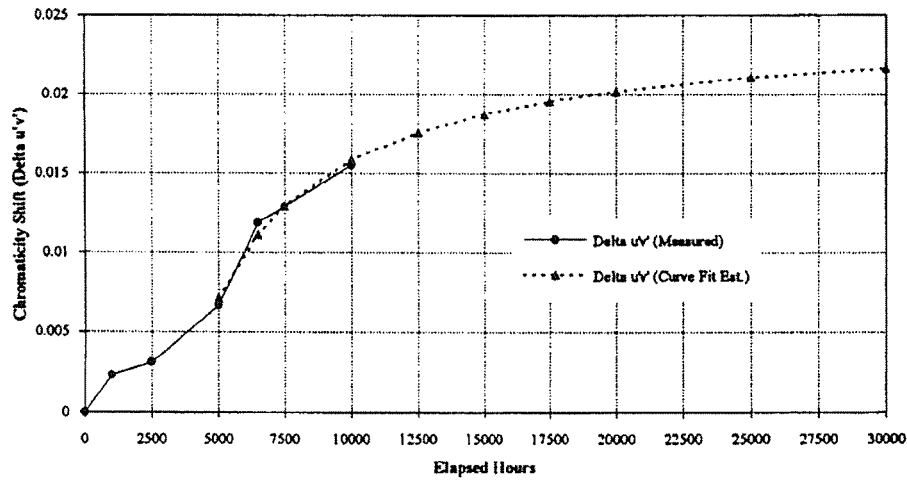


Figure 7. Average variation in chromaticity at diffuser (in CIE 1976 units) over test duration.

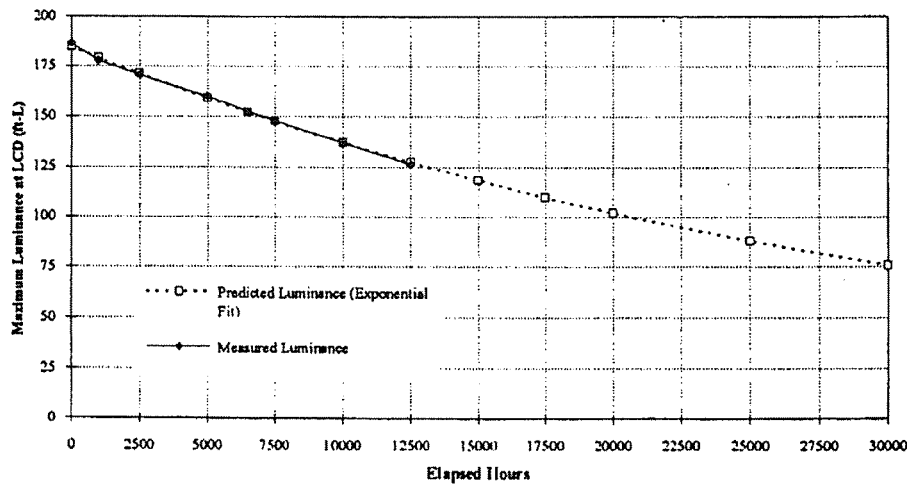


Figure 8. Measured and predicted display luminance at the LCD surface for 30,000 hour period.

Exhibit C

ROBINS, KAPLAN, MILLER & CIRESI LLP

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ATTORNEYS AT LAW

AMY N. SOFTICH
612-349-8475

February 9, 2007

VIA FACSIMILE AND MAIL

John F. Presper
Oblon, Spivak, McClelland, Maier & Neustadt, P.C.
1940 Duke Street
Alexandria, Virginia 22314

Re: Honeywell International Inc., et al. v. Apple Computer, Inc., et al.
Our File No.: 019896-0229

Dear Mr. Presper:

I write in follow-up to our prior correspondence and our February 8th meet and confer relating to Optrex's intention to utilize Robert Smith-Gillespie as a consultant/expert in this matter. As mentioned in my letter of February 5, and as reiterated in our meet-and-confer, Honeywell has legitimate concerns relating to Optrex's designation of Mr. Smith-Gillespie. Mr. Smith-Gillespie worked at Honeywell from 1985 to 1997 and was exposed to confidential Honeywell material and potentially attorney-client communications.

As we discussed on February 8th, Honeywell is willing to work with Optrex to reach a mutually acceptable resolution to this issue. Honeywell would like to be assured that Mr. Smith-Gillespie will serve as a true consultant/expert, and not as a fact witness. In that regard, Honeywell is willing to reserve its objection to Mr. Smith-Gillespie under the Stipulated Protective Order if Optrex and Mr. Smith-Gillespie agree to the following:

1. Mr. Smith-Gillespie and Optrex confirm (by signing below) that Mr. Smith-Gillespie has not disclosed, and will not disclose, any information to Optrex (or any other source) that he learned or obtained while employed at Honeywell. This information shall include but is not limited to: (a) any personal knowledge Mr. Smith-Gillespie obtained during his employment at Honeywell, including information from nonpublic documents, meetings, conversations, and correspondence; and (b) any documents or materials from Mr. Smith-Gillespie's personal files that were created during his employment at Honeywell.
2. The factual basis for any opinions Mr. Smith-Gillespie provides to Optrex in connection with this matter shall be based solely and exclusively upon the following: (a) publicly available information; (b) documents produced in this litigation; and (c) deposition testimony provided in this litigation. Moreover, Mr. Smith-Gillespie shall not rely in

John F. Presper
February 9, 2007
Page 2


any way upon information learned or obtained during his employment with Honeywell.

If Optrex and Mr. Smith-Gillespie will agree to these terms, please indicate such agreement by counter-signing below and returning this letter to me.

Please be advised that if Optrex and/or Mr. Smith-Gillespie will not agree to these terms, Honeywell will have no choice but to raise this issue with Court. Given that Honeywell would have to make such a filing with the Court on or before Thursday, February 15, I would appreciate if you would contact me by the close of business on Tuesday, February 13 to confirm Optrex's position on this issue. I look forward to hearing from you.

Sincerely,

ROBINS, KAPLAN, MILLER & CIRESI L.L.P.



Amy N. Softich

cc: Matthew Woods
Alan McKenna

** JOB STATUS REPORT **

AS OF FEB 09 2007 17:36 PAGE. 01

R. K. M. & C. LLP

JOB #080

DATE	TIME	TO/FROM	MODE	MIN/SEC	PGS	STATUS
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ROBINS, KAPLAN, MILLER & CIRESI LLP

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ATTORNEYS AT LAW

AMY N. SOFTICH
612-349-8475

February 9, 2007

VIA FACSIMILE AND MAIL

John F. Presper
Oblon, Spivak, McClelland, Maier & Neustadt, P.C.
1940 Duke Street
Alexandria, Virginia 22314

Re: Honeywell International Inc., et al. v. Apple Computer, Inc., et al.
Our File No.: 019896-0229

Dear Mr. Presper:

I write in follow-up to our prior correspondence and our February 8th meet and confer relating to Optrex's intention to utilize Robert Smith-Gillespie as a consultant/expert in this matter. As mentioned in my letter of February 5, and as reiterated in our meet-and-confer, Honeywell has legitimate concerns relating to Optrex's designation of Mr. Smith-Gillespie. Mr. Smith-Gillespie worked at Honeywell from 1985 to 1997 and was exposed to confidential Honeywell material and potentially attorney-client communications.

As we discussed on February 8th, Honeywell is willing to work with Optrex to reach a mutually acceptable resolution to this issue. Honeywell would like to be assured that Mr. Smith-Gillespie will serve as a true consultant/expert, and not as a fact witness. In that regard, Honeywell is willing to reserve its objection to Mr. Smith-Gillespie under the Stipulated Protective Order if Optrex and Mr. Smith-Gillespie agree to the following:

1. Mr. Smith-Gillespie and Optrex confirm (by signing below) that Mr. Smith-Gillespie has not disclosed, and will not disclose, any information to Optrex (or any other source) that he learned or obtained while employed at Honeywell. This information shall include but is not limited to: (a) any personal knowledge Mr. Smith-Gillespie obtained during his employment at Honeywell, including information from nonpublic documents, meetings, conversations, and correspondence; and (b) any documents or materials from Mr. Smith-Gillespie's personal files that were created during his employment at Honeywell.
2. The factual basis for any opinions Mr. Smith-Gillespie provides to Optrex in connection with this matter shall be based solely and exclusively upon the following: (a) publicly available information; (b) documents produced in this litigation; and (c) deposition testimony provided in this litigation. Moreover, Mr. Smith-Gillespie shall not rely in

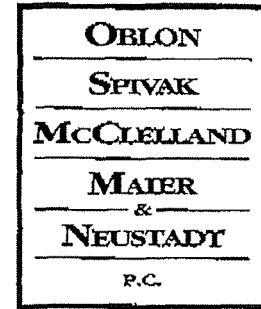
Exhibit D

FEB. 13. 2007 10:32AM OBLON SPIVAK

NO. 686 P. 2

February 13, 2007
VIA FACSIMILE

Amy N. Softich, Esq.
ROBINS, KAPLAN, MILLER & CIRESI L.L.P.
2800 LaSalle Plaza
800 LaSalle Avenue
Minneapolis, MN 55402



ATTORNEYS AT LAW

ANDREW M. OLLIS
(703) 412-7023
AOLLIS@OBLON.COM

Re: *Honeywell Litigations*
C.A. Nos. 04-1337, -1338, and -1536-KAJ
Our Ref: 0201613-261775US

Dear Amy,

This letter responds to your letter to John Presper of February 9, 2007. We appreciate Honeywell's willingness to work with Optrex to make Mr. Smith-Gillespie available as a consultant. Several aspects of your proposal, however, are troubling to Optrex.

First and foremost is Honeywell's position that it is willing to "reserve its objection" to Mr. Smith-Gillespie if Optrex and Mr. Smith-Gillespie agree to certain conditions. Optrex cannot accept any such reservation of rights by Honeywell. Such reservation prejudices Optrex's ability to work with Mr. Smith-Gillespie by forever holding out the possibility that Honeywell may *later* object to Mr. Smith-Gillespie after significant time and effort have been expended. Optrex therefore must insist that Honeywell at this time either object or not object to Mr. Smith-Gillespie.

Second, Honeywell expresses concern that Mr. Smith-Gillespie only work as a consultant/expert and not as a fact witness. While Optrex presently intends that Mr. Smith-Gillespie serve only as an expert/consultant, Optrex will not foreclose the possibility of also calling Mr. Smith-Gillespie as a fact witness in the future should it be necessary to do so. For example, as you are aware, Mr. Smith-Gillespie also worked at Honeywell on the Boeing 777 program, and Optrex presently does not know whether any of the relevant testimony provided by the inventors concerning this program might differ from Mr. Smith-Gillespie's own understanding of the program.

Third, Optrex is willing to agree that Mr. Smith-Gillespie shall not disclose to Optrex (or other defendants) confidential Honeywell information learned during his employment at Honeywell to the extent such information has been maintained confidential by Honeywell. Optrex cannot agree to Honeywell's broader proposals because they are not so limited.

1940 DUKE STREET ■ ALEXANDRIA, VIRGINIA 22314 ■ U.S.A.
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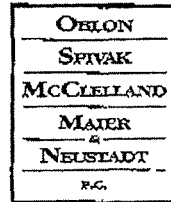
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OBLON SPIVAK

NO. 686

P. 3

Amy N. Softich, Esq.
ROBINS, KAPLAN, MILLER & CIRESI L.L.P.
February 13, 2007
Page 2



Finally, Mr. Smith-Gillespie's own work experiences cannot be entirely separated from any expert report. Any expert report itself can certainly be limited to publicly available information and information produced during the litigation. However, should rebuttal testimony or answers to Honeywell cross-examination call on Mr. Smith-Gillespie to refer to his personal and/or confidential experiences from his work at Honeywell, Mr. Smith-Gillespie should be free to so testify.

In summary, we look forward to discussing these matters with you further and amicably addressing our differences if possible.

With best regards,

Very truly yours,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in cursive script that reads "Andrew M. Ollis".

Andrew M. Ollis

AMO:aw